

## ASSESSING THE LEVEL OF DRUG COMPLIANCE AMONG HYPERTENSION PATIENTS ATTENDING OUTPATIENT DEPARTMENT IN A SELECTED HOSPITAL

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### ABSTRACT

*A detailed study was conducted to assess the knowledge and understanding of susceptibility to hypertensive clients in the selected hospital. The sample consists of 30 subjects with hypertension. Convenient sampling technique was used for sample selection. The data collection tool consists of two parts, demographic variables, questionnaire to assess the level of drug compliance among hypertension patients. The results showed that 25(83.33%) had good drug compliance, 4(13.33%) had fair drug compliance of hypertensive patients was good. There is a need to create awareness among hypertensive clients.*

**KEYWORDS:** Hypertension Patients, Selected Hospital & Level of Drug

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### INTRODUCTION

Hypertension is a common chronic problem in worldwide. It is defined as 90mmHg diastolic blood pressure in those with systolic blood pressure greater than 140 mmHg and those on high blood pressure medication. Its prevalence defers from one country to another. High blood pressure also known as hypertension, is increased pressure of blood in the arteries. Blood pressure is the result of two major factors that are independent or co-occurring.

- The heart sends blood with great force.
- The small blood vessels of the body (called arteries) are narrow and therefore put more pressure on the walls of the blood vessels. In 2019, 972 million people in the adult population will have hypertension worldwide, and it is common developed (37.3%) and underdeveloped (22.9%) countries, with over 90-95% of adult blood pressure become mandatory.

Blood pressure is one of the lifestyle related diseases. The WHO estimates that the global disease burden is 4.5%. Treatment with appropriate medications is an important factor in controlling high blood pressure and reducing the risk of complications. However, treatment consent has failed to comply with ten sub-optimal, especially in developed countries, and rates are still high in developing countries.

In the 2005 analysis of global data for the global burden of hypertension, 20.6% of Indian men and 20.9% of Indian women suffer from hypertension. Blood pressure is estimated to be between 22.9 and 23.6 for Indian men and women in the year 2018.

The world health organization (WHO) estimates that by 2010, 60% of the world's heart patients will be by 2010. An Asia pacific specialist with the International Obesity Taskforce, a medical NGO that coordinates with the WHO on obesity issues, said that among all Asians, South Asians have the worst problems when it comes to heart disease. About 50% of CVD related deaths in India occur within the age of 70, compared to only 22% in the west. Cardiovascular disease accounted for 16.7 million or 29.2% of all world deaths in 2008. Heart attack deaths have dropped by more than 50% in many industrialized countries since the 1960s, accounting for 80% of global heart disease-related deaths now. Found in low-middle-income countries, most of which are in Asia.

The concepts of drug adherence and treatment satisfaction are commonly used in clinical research to assess medicine and improve treatment outcomes. A study conducted on 6 November 2013 included 410 hypertensive patients. The average age of the participants was 58.38±10.65 years. 52 % were women and 36.8% were committed to low blood pressure medications. There was a significant difference in mean scores in the domains of effective ( $p<0.00$ ), convenience ( $p<0.001$ ) and global satisfaction ( $p<0.001$ ), but not in the side effect ( $p=0.4666$ ) domains between the patients. Adheres to various levels after adjustment for covariates. Using multiple linear regression, global treatment satisfaction is still statistically ( $p=0.001$ ) associated with drug adherence.

## OBJECTIVES

- Assess the level of compliance with the drug in patients with hypertension.
- To relate the level of drug compliance in hypertensive patients with the population variables of their choice.

## LITERARY REVIEW

Noah Harari (2016) studied blood pressure, which remains a significant public health problem due to the illness, mortality and economic impact associated with the study. Sample size 205, 1.56 billion with high blood pressure. As in other studies, more than one drug was prescribed to 67.92% of patients, with the most commonly used combination (CB+BB) being alpha blockers (7.55%). A total of 697 other antihypertensive drugs were prescribed, of which 23.57% were ARVs, 16.79% ACEIS, 13.63% BBS and 11.915%, CCBS, 32% from the essential medication list for hypertension.

Rowa al-Ramah (2014) 'A study to assess the adherence to treatment of Palestinian hypertensive patients and to examine the impact of population and psychosocial variables on drug adherence.' A cross-sectional, detailed study of the question-and-answer session was conducted in a group of outpatient clinics of the ministry of health. At a young age (<45 years), living in a village rather than in a city, the health status was rated as very good, good or poor, compared to excellent, memory drugs. Treatment for fear of guilt, adverse effects, and dissatisfaction is a statistically significant association with low level drug adherence ( $p<0.05\%$ ).

Saud Hzyoud (2013), 'A study commonly used drug adherence and clinical satisfaction perception in clinical research, for assessing pharmaceutical are and improving treatment outcomes'. Sample sizes 400 and 10 hypertensive patients joined the study. Average age of participants was 58.38±10.65 years. 52% females and 36.8% had lower antihypertensive drug adherence.

## METHODOLOGY

The study followed an exploratory research approach with a descriptive research design. The study was conducted at a selected hospital in Perambalur. 30hypertensive clients were included in the study using a favorable sampling method to meet inclusion criteria. Attendance criteria for OPD at selected hospital perambalur with blood pressure for patients aged 31-70 years. Patients interested in participating in this study. Exception criteria patients who have not taken the drug.

### **Data Collection Tool**

The tool consists of 2 parts,

Section I; population variables.

Section II; compliance scale is used to assess the level of drug compliance.

### **RESULTS**

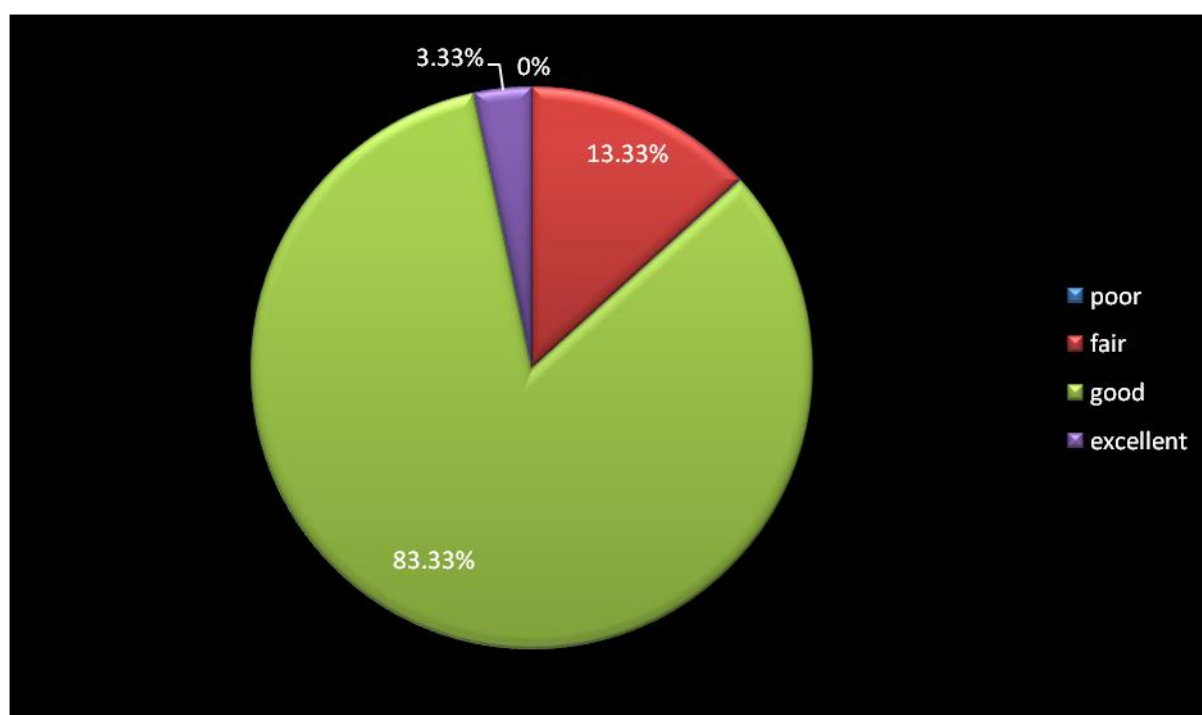
Table 1 shows that 50% of the participants were from the age group of 61-70 years, 63.33% were women,83.33%were illiterate,100 % of samples were doing farm work, 96.66% of samples were earning monthly <5000, half of the samples belongs to joint family, 66.66% of samples were not having bad habits, 96.66% of samples did not a known history of hypertension, half of the samples were known case of hypertension for last two years, 96.66% of samples were taking medication twice a day.

Figure 1: shows that 3.33% of the samples had excellent drug compliance,83.33% of the samples had good drug compliance and 13.33% of the samples had reasonable drug compliance.

**Table 1: Frequency and Percentage Distribution of Population Variables.**

S. No	Demographic Variables	Frequency(f)	Percentage(%)
1.	Age		
	31-40	-	0%
	41-50	5	16.66%
	51-60	10	33.33%
	61-70	15	50%
2.	Gender		
	Male	11	36.66%
	Female	19	63.33%
3.	Education		
	Illiterate	25	83.33%
	Literate	5	16.66%
4.	Occupation		
	Agriculture	30	100%
	Business	-	-
	Employee	-	-
5.	Income		
	Rs.<5000	29	96.66%
	Rs.6000-10000	1	3.33%
	Rs.<10000	-	-
6.	Type of family		
	Nuclear family	14	46.66%
	Joint family	16	43.33%

7.	Habits		
	Alcohol	1	3.33%
	Smoking	2	6.66%
	Tobacco	7	23.33%
	None	20	66.66%
8.	Family history of hypertension		
	Yes	1	3.33%
	No	29	96.66%
9.	Duration of hypertension		
	1 year-2years	15	50%
	3years-5years	10	33.33%
	More than 5 years	5	16.66%
10.	Duration of drug treatment for hypertension		
	1-2 years	17	56.66%
	3-5 years	8	26.66%
	>5 years	5	16.66%
11.	Frequency of medication		
	Once a day	1	33.33%
	Twice a day	29	96.66%



**Figure 1: Frequency and Percentage Distribution Relative to Medication Compliance level in Hypertensive Patients.**

## DISCUSSIONS

### First Objective

Regarding the level of drug compliance among 30 samples in hypertension. Among these patients 3.33% of them had excellent drug compliance, 83.33% of them had good drug compliance, 13.33% of them had fair drug compliance.

## **Second Objective**

The second objective of the study was to link study compliance with their population variables. An important correlation was found between the level of drug compliance with their population variables such as gender, family, duration of blood pressure, frequency of the drug. No significant correlation was found between their population such as age, education, occupation, income, habits, family history of hypertension, duration of drug treatment for hypertension and their medication level.

## **Nursing Implications**

### **Nursing Service**

Service education should be provided to all nurses to upgrade knowledge of drug compliance levels in patients with hypertension.

The important role of a nurse is to provide information in simple ways to increase students knowledge through health education.

### **Nursing Education**

Nursing students to be encouraged to prepare health education plans for illiterate patients in order to modify the level of drug compliance.

### **Nursing Administration**

An in-service education program has to be arranged for all nurses and other paramedical staff periodically to keep in trend and the advancement in the clinical practice.

### **Nursing Research**

It is essential to identify the present level of drug compliance, how much more information public or people. This study motivates the other investigator to gain modify the level of drug compliance.

## **RECOMMENDATION**

- Similar studies can be repeated in various other settings.
- Sitting and study can be conducted in a large group.
- Studies can be carried conducted by using a teaching programme.

## **CONCLUSIONS**

The purpose of this study was to assess drug compliance levels in hypertensive patients between the ages of 31-70 years. The important relationship in the study between adherence to high blood pressure medication levels with their population variables should be made aware to the hypertensive patient in the nurse.

## **REFERENCES**

1. *Brunner and Suddarths, Textbook of medical surgical nursing 13 th Edition, Wolter Kluwer publishers, New Delhi P.No 1097e.*
2. *Lewis A Textbook of Medical Surgical Nursing, 2 nd edition, Elsevier publishers, India P.No 474-494.*

3. *Lipponcott A Textbook of Medical Surgical Nursing 10 edition, Wolters Kluwer Publishers, New York P.No.1184-1191.*
4. *Othayoth, R. A. J. A. T. H., S. R. A. V. Y. A. Kalivarapu, and M. A. H. E. N. D. R. A. N. Botlagunta. "Nanophytomedicine and drug formulations." Int J Nanotechnol Appl 4: 1-8.*
5. *Patil, T. A. Z. E. E. N., et al. "Fungi: An ideal biotransformation model for mimicking mammalian drug metabolism." Int. J. Med. Pharm. Sci 4: 15-24.*
6. *Hadi, Ali Mohammed. "Evaluation of Different Antiasthmatic Drugs Effects on Pulmonary Function In Adult Patients Withchronic Asthma In Basra Governorate." International Journal of Medicine and Pharmaceutical Sciences (IJMPS) 5: 49-56.*
7. *Firoz, Syed Gouse, R. Kothai, and B. Arul. "Novel Approaches for Pulsatile Drug Delivery System." Journal of Critical Reviews 7.13: 2282-2289.*
8. *Sharma, Garima. "A Critical Study of the Biology Curriculum at Senior Secondary Stage With Respect to Life Skills Education and the HIV/AIDS Education." IASET: International Journal of Library & Educational Science (IASET: IJLES) 2.3 : 1-10.*
9. *Ezebuenyi, M. I. C. H. A. E. L., et al. "Evaluation of Selected Medicinal Herbs for Antidiabetic Activity via Alpha-glucosidase Inhibition." International journal of general medicine and Pharmacy vol 6: 59-64.*